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COSC370

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HW2

3) HTTP, DNS, TCP, UDP

7) 2RTT0 + i = 1n𝝨 RTTi

8) a- 2RTT0 + 8(2RTT0) + i = 1n𝝨 RTTi

b- 2RTT0 + 2(2RTT0) + i = 1n𝝨 RTTi

c- 2RTT0 + RTT0 + i = 1n𝝨 RTTi

9) a- total\_avg\_response\_time = Δ /(1 - Δꞵ) + internet\_delay Δ = L / R

= 0.85Mb / 15Mbps = 0.0566666

= 0.0567/(1 - (0.0567(16)) + 3

= **3.61099sec**

b- Δ /(1 - (0.4)Δꞵ) = 0.567/(1 - (0.4)(0.567)(16)) = 0.08994224sec

0(0.6) + (.4)3.0899 = **1.2359sec**

22)

Client-Server

| u (Kbps) / N | 10 | 100 | 1000 |
| --- | --- | --- | --- |
| 300 | 7680 | 51200 | 512000 |
| 700 | 7680 | 51200 | 512000 |
| 2000 | 7680 | 51200 | 512000 |

P2P

| u (Kbps) / N | 10 | 100 | 1000 |
| --- | --- | --- | --- |
| 300 | 7680 | 25906 | 47568 |
| 700 | 7680 | 15616 | 21524 |
| 2000 | 7680 | 7680 | 7680 |